# **MODIS TECHNICAL TEAM MEETING**

# October 5, 1999

Vince Salomonson chaired the MODIS Technical Team Meeting. Present were Barbara Conboy, Wayne Esaias, Dorothy Hall, Ed Masuoka, Bob Murphy, Mike Roberto, and Bruce Vollmer, with Deborah Howard recording the minutes.

## 1.0 SCHEDULE OF EVENTS

October MODIS PI Processing Meeting CANCELLED\*

EOS-PM SWAMP Meeting October 15, 1999

Next MODIS PI Processing Meeting November 3, 1999

Building 33, Room H114 9:30 a.m.

Next MODIS Science Team Meeting November 16–17, 1999

Location near GSFC TBD

Terra Launch No earlier than November 23, 1999

Vandenberg Air Force Base

(Lompoc, CA)

AGU 1999 Fall Meeting December 13–17, 1999

(San Francisco, CA)

IGARSS 2000 Abstracts Due December 28, 1999

AGU 2000 Spring Meeting May 30–June 3, 2000 (Washington, DC)

IGARSS 2000 July 24–28, 2000 (Honolulu, HI)

EOS-PM Launch December 21, 2000

\*Note: The MODIS PI Processing meeting scheduled for Wednesday, October 6, 1999 was cancelled. This was partially due to the MODAPS and DAAC's participation in the MOSS-3 dry-run test.

### 2.0 MINUTES OF THE MEETING

#### 2.1 Instrument

Roberto reported that the meeting of the Engineering Review Board (ERB) at KSC on the RL-10 engines that was scheduled for October 1st had been delayed for another week. This was the meeting where NASA engineers would establish confidence in the flight status of the RL-10 engines. The analytical model for the Terra engines was going to be corrected and rerun.

Roberto said that there is still no resolution on the ADC issue for bands 30 through 36. Santa Barbara is documenting their assessments of the ADC issue. Although the design is the same for the PFM, ADC is not an issue for it. The effect of the ADC problem is mostly a loss of redundancy, but there is no completely clean configuration.

A second instrument issue has been the registration between the cold and warm focal planes. During testing, nothing was found to be physically loose and the focal plane registration remained stable. The third issue is a change in the responsivity of Bands 23 and 32. This may be related to a vignetting effect.

The group discussed an additional issue. During the second thermal vacuum test, two channels in band 6 (1.5 micrometers) were found to be not working. In the third thermal vacuum test the number of non-working detectors grew to five in band 6 and one in band 5 (1.2 micrometers). The non-working detectors in band 6 are #1,2,7,8, and 19. This results in there only being one good pixel in a 2 km strip extending from channel19 through channel 2 and another 1 km strip (channels 7 and 8) with no data.

#### 2.2 GDAAC

Vollmer reviewed the GDAAC Notes for MODIS Technical Team Meeting dated 10/5/99 (Attachment 1). The SSIT in progress is going well. The MOSS-3 dry run is in progress and testing is off to a slow start with some manual fixes needed. Vollmer said that production is going well. Some staff from Landover are at the GDAAC working on Drop 5A.02 and providing ECS patches as they are needed. When this process is complete, the plan is to roll up these patches into a formal release; this would create a defined baseline.

Vollmer reported some problems with the PDF server during inserts of products from MODAPS to the DAAC. Some manual fixes have been necessary. The problem seems to be configuration issues. However, the DAAC can insert products and making them available to users. Murphy asked what percentage of a day's production could be done in a day and Vollmer replied that information would come out of MOSS-3.

#### 2.3 MODAPS

Masuoka said that there were some EDOS problems leading into the MOSS-3 dry run. There was a 5-minute granule lead-in gap and exit gap and some gaps in distribution. However, some ECS staff are working on-site to fix such problems.

Masuoka reviewed the Launch Ready PGE Status dated 10/5/99 (Attachment 2). Esaias asked about the multiple versions of some PGE's and how these are prioritized. He also asked about running earlier versions in order to run whole chains. Masuoka replied that the highest priority now is to get our products to insert into the archive. He said that system changes are holding up PGE testing and that MODAPS would need to work with the disciplines to prioritize the PGE processing. Next week when Sue Walsh is here, they'll work on clearing up the Oceans priorities.

Salomonson asked about plans to include a space for MODIS early images on the MODIS home Web site. After launch, it would include downloadable early images on the MODIS site and a link to the DAAC's for obtaining products and data. The TRMM and SeaWiFS Web pages and how they process and present images are good examples. Conboy said that Michael Hohner would update the MODIS Web pages to include such images. Masuoka suggested that Hohner work with Al Fleig or himself on adding a space for early images to the MODIS Web site.

Masuoka stated that he was planning to send some MODAPS data to SIMBIOS for validation needs.

He also mentioned an issue with L1A, where .2 of images include a scan line. The DAAC has conducted testing with a short data line and plans to test with a longer line.

Esaias said that ECS is conducting a 2-week study on increasing the ingest rates. (See Attachment 3 for ingest requirements.) Masuoka said that he is working on an ICD between MODAPS and ECS that would include different volumes and look at different scenarios. He mentioned looking at compression as a potential solution.

Murphy asked whether we can systematically track the products that are ordered, including how many times they are ordered. Vollmer replied that we can track the number of times a product is ordered and can tell which products have been ordered by subscription and by order.

Masuoka said that a EOS-PM SWAMP meeting is scheduled for October 15, 1999.

### 2.4 Snow and Ice

Hall said that her group has been working on course resolution and that it would be available for early distribution and for browse. She received a new data set recently on Alaska that seems to show snow melting and new snowfall. Hall is working with the University of Alaska to examine that.

# 2.5 Oceans

Esaias reported that the initialization cruise began last week. It will be about 20 days long. He said that he attended a good meeting on the baseline with ECS.

# **2.6 MAST**

Salomonson said that we would continue to plan to have the MODIS Science Team Meeting in the GSFC area on November 16-18. The attendance at the launch could be planned more informally and left TBD until a launch date is firmly set. The upcoming MODIS Science Team meeting will be a smaller meeting this time and will be on an invitation only basis. Plans are to include Science Team members and only one associate (per member).

Conboy presented a tentative agenda for review by those present. A copy was

also sent for review to the Discipline Leads and potential presenters. The focus of the meeting is MODIS Science Team launch preparedness.

### 3.0 ACTION ITEMS

## 3.1 New Action Items

1. Hohner, Fleig, and Masuoka: Include a space for MODIS early images on the MODIS home Web site. After launch, it would include downloadable early images on the MODIS site and a link to the DAAC's for obtaining products and data. The TRMM and SeaWiFS Web pages and how they process and present images can be used as good examples.

## 3.2 Action Items Carried Forward

1. Legg: Find out when and how NASA MODIS representatives will be integrated into the NOAA review process and report on status to the MODIS Technical Team. NOAA has agreed to have MODIS representatives serve on the NESDIS data product review boards. However, MODIS representatives have not yet been invited to participate in an advisory panel.

Status: This item remains open. At the August 26 MODIS Technical Team meeting, Dan Tarpley said that NASA MODIS representatives would be included in an upcoming review board meeting.

2. Murphy and Conboy: Inputs for the EOS Data Products Handbook PM-1 Volume 2 were due to Barbara Conboy by June 17, 1999.

Status: This item remains open. In Murphy's absence, Conboy is working with Chris Justice and Wayne Esaias to get final reviews for the Land and Oceans sections. As of September 28, Conboy is only awaiting input from Oceans.

3. Hohner and Howard: Develop a weekly MODIS news page linked to the MODIS home Web site. It should include hot items and reflect weekly progress.

Status: This item is in progress.

4. Masuoka: Submit an EOS-PM Data Product Update to ESDIS.

Status: This action item remains open